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NOTICE OF ALLOWANCE AND FEE(S) DUE

21125

7590

12/31/2009

NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604 EXAMINER

CARTER, KENDRA D

ART UNIT PAPER NUMBER

1627

DATE MAILED: 12/31/2009

APPLICATION NO.	TION NO. FILING DATE FIRST NAMED INV		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,056	12/04/2003	Antonis Zervos	105150-0002	7674

TITLE OF INVENTION: METHOD AND COMPOUNDS FOR INHIBITION OF CELL DEATH

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	03/31/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 21125 7590 12/31/2009 Certificate of Mailing or Transmission NUTTER MCCLENNEN & FISH LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 10/728.056 12/04/2003 105150-0002 7674 Antonis Zervos TITLE OF INVENTION: METHOD AND COMPOUNDS FOR INHIBITION OF CELL DEATH APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$755 \$300 \$0 \$1055 03/31/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS CARTER, KENDRA D 1627 514-256000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,056	12/04/2003	Antonis Zervos	105150-0002	7674
21125 75	590 12/31/2009		EXAM	INER
NUTTER MCCLENNEN & FISH LLP			CARTER, KENDRA D	
WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			ART UNIT	PAPER NUMBER
			1627 DATE MAILED: 12/31/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 477 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 477 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/728,056	ZERVOS, ANTONIS			
Notice of Allowability	Examiner	Art Unit			
	 KENDRA D. CARTER	1627			
	RENDINA D. CARTER	1027			
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is su	this application. If not included nication will be mailed in due course. THIS			
1. This communication is responsive to <u>8/25/09</u> .					
2. X The allowed claim(s) is/are 20-22,24-29 and 54-56 (renum	<u>bered 1-12)</u> .				
 3.		r (f).			
		n No			
2. Certified copies of the priority documents have been received in Application No					
 Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). 					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached					
1) ☐ hereto or 2) ☐ to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t					
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT					
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 □ Notice of Info	ormal Patent Application			
 Notice of Neterences Gled (110-092) Dotice of Draftperson's Patent Drawing Review (PTO-948) 		mmary (PTO-413),			
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./N	Mail Date Amendment/Comment			
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit	<u></u>	Statement of Reasons for Allowance			
of Biological Material	9. ☐ Other				

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George Xixis on December 15, 2009.

The application has been amended as follows:

- 1. In claim 20, line 1, after "activity," <u>insert</u> "from about 20% to about 90%", and on page 4, line 1, after "consisting of a" <u>insert</u> "chloride,".
- 2. In claim 24, line 2, after "compound is" <u>delete</u> "Ucf-101" and <u>insert</u> "formula I, wherein R_1 is a nitro group (ucf-101)".
- 3. In claim 25, line 2, after "compound is" <u>delete</u> "Ucf-102" and <u>insert</u> "formula II, wherein R_1 is a chloride and R_2 is a methoxy group (ucf-102)".
- 4. In claim 26, line 2, after "compound is" <u>delete</u> "Ucf-103" and <u>insert</u> "formula III, wherein R₁ is CO₂H (ucf-103)".

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5. In claim 27, line 2, after "compound is" <u>delete</u> "Ucf-104" and <u>insert</u> "formula IV, wherein R₁ is a nitro group (ucf-104)".

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

Applicant's amendments and Declaration has been fully considered. In light of the Examiner's amendments, claims 20-22, 24-29 and 54-56 are allowed and renumbered to claims 1-12.

In light of the Declaration under 37 C.F.R. 1.132, the Cilenti et al. reference is not by "another". Therefore the 35 U.S.C. 102(a) rejection of claims 20, 22, 25-28 and 54-55 as being anticipated by Cilenti et al. is withdrawn. Also, the 35 U.S.C. 103(a) rejection of claims 21, 29 and 56 as being unpatentable over Cilenti et al. is withdrawn.

The following is an examiner's statement of reasons for allowance: The claims 20, 22, 25-28 and 54-55 are drawn to a method of inhibiting Omi/HtrA2 activity comprising contacting a cell having Omi/HtrA2 activity with an apoptosis inhibiting compound of formula I, II, III or IV. There is no prior art disclosing the applicant's compounds or their ability to inhibit Omi/HtrA2 activity. The closest art is Alnemri (US 2003/0073629 A1), in which teaches Omi/HtrA2 activation of apoptosis via a caspase-independent manner through its protease activity with a peptide (see page 1, paragraph

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3, lines 1-4 and abstract). Alnemri does not teach the applicant's compounds to inhibit

Omi/HtrA2 activity.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kendra D. Carter whose telephone number is (571) 272-

9034. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

/Kendra D Carter/ Examiner, Art Unit 1627

/SREENI PADMANABHAN/ Supervisory Patent Examiner, Art Unit 1627

Business Center (EBC) at 866-217-9197 (toll-free).